2025

VILLAGE OF WILSON

GHG INVENTORY

ONE REGION FORWARD

This document presents an overview of the greenhouse gas (GHG) emissions in the Village of Wilson, along with related data on the Village's economics, transportation, energy, and land use. This information can help promote local and regional resilience in the Buffalo Niagara region (Erie and Niagara Counties).

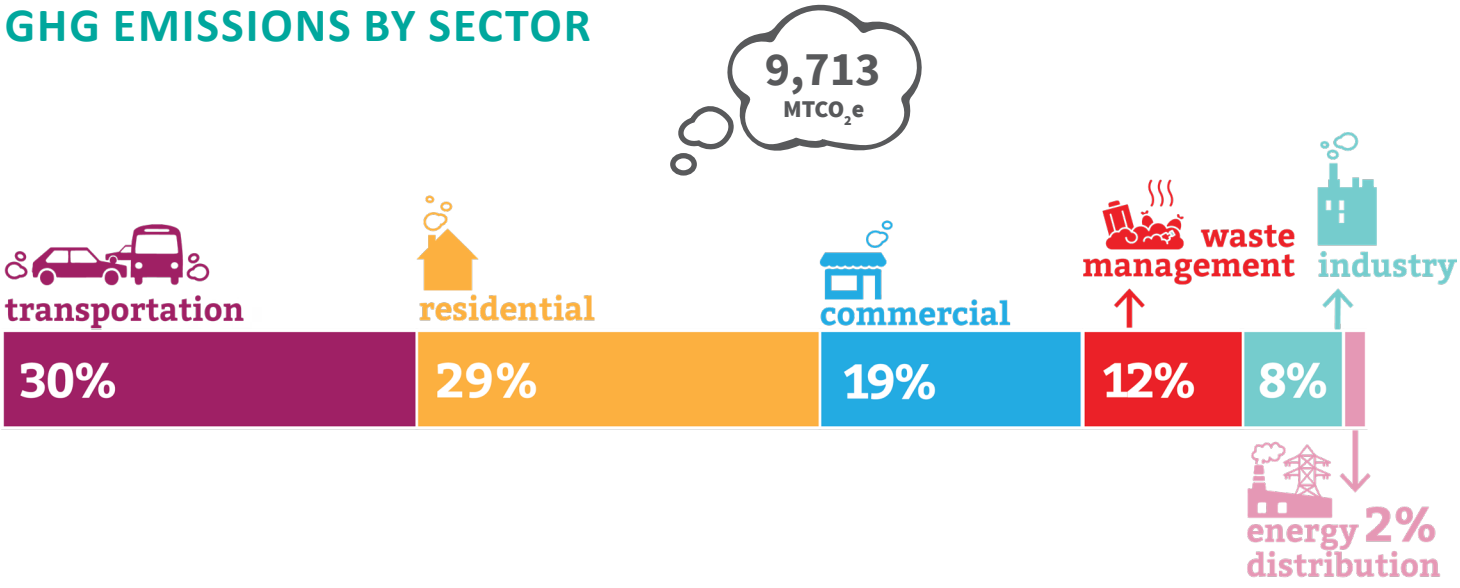
The Village of Wilson covers 0.81 square miles with a population of 1,371 and 516 jobs. **An estimated 9,713 Metric Tons of CO_2 equivalent ($MTCO_2e$) are emitted in the Village annually.** Most GHG emissions in the Village of Wilson come from the transportation and residential sectors, which account for a combined 59% of all emissions in the Village.

This summary is part of a regional GHG inventory for Erie and Niagara Counties conducted by the UB Regional Institute as part of the One Region Forward initiative. Additional information about that effort, including methodology, can be found on this summary's back page.

COMMUNITY CONTEXT

	VILLAGE	REGION
Population	1,371	1,163,462
Jobs	516	558,902
GHG Emissions ($MTCO_2e$)	9,713	12.96M
Median Household Income	$55,139	$67,638
Poverty Rate	21.90%	13.60%

GHG EMISSIONS BY SECTOR



*NOTE: Municipal GHG emissions are estimated using various data sources. See Data Sources and Notes for more. Numbers may not add to 100% due to rounding.

GHG EMISSIONS AND ENERGY CONSUMPTION

PER CAPITA EMISSIONS ($MTCO_2E$ PER PERSON)

	Residential	Commercial	Industrial	Transportation	Waste	Agriculture	Energy Distribution	TOTAL
VILLAGE	2.07	1.37	0.54	2.16	0.84	0	0.12	7.08
REGION	2.63	1.31	1.50	4.48	0.84	0.22	0.16	11.2

PER CAPITA ENERGY CONSUMPTION

		TOWN	REGION
Electricity (kWh/person)	**Residential**	**3,211.00**	4,253
	Non-residential	**3,455.21**	5,643
Natural Gas (MMBtu/person)	**Residential**	**30.59**	38.56
	Non-residential	**17.19**	27.01

RENEWABLE ENERGY PRODUCTION

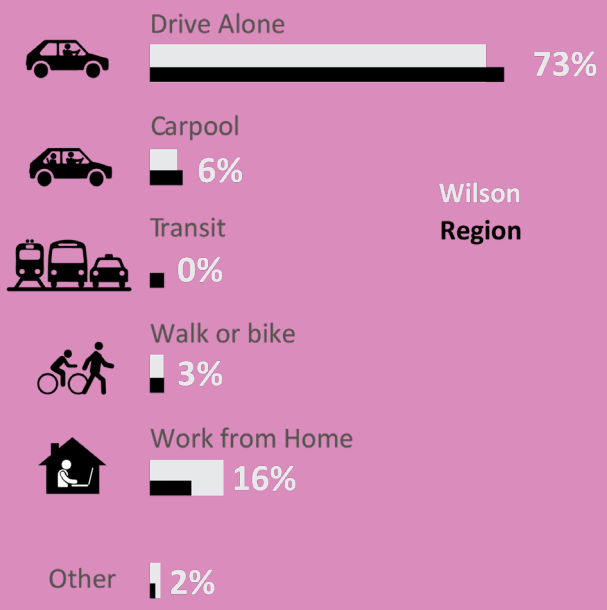
Solar (MWh)	**0**
Wind (MWh)	**0**
Other (MWh)	**0**
TOTAL (MWh)	**0**

That's enough electricity to power n/a homes with renewable energy

TRANSPORTATION

	VILLAGE	REGION
Vehicles Per Capita	**0.57**	0.61
Electric Vehicles	**1.10%**	1.50%
Walkability (Walk Score)	**50**	40
Miles of Bike Lanes/Trails	**0**	440
Bike Score	**45**	41

MODES OF TRAVEL TO WORK



CLIMATE ACTION CONTEXT MAP

This map sheds light on community momentum on building climate resilience--adopting renewable energy, preserving natural areas, and cleaning contaminated sites. This context can help inform how and where future actions may be prioritized in the community.

10 **Acres of public parks and conserved lands**

52 **Acres of Forests**

NOTES: Disadvantaged communities are census tracts designated by NYSERDA based on a set of environmental/climate, socioeconomic, and demographic factors. This designation may correspond to NYSERDA funding opportunities. Solar panel installations include rooftop and small-scale solar projects. See Data Sources and Notes.

LAND COVER, 2021

% Developed Land	**37%**
Net change in developed land, 2001-2021	**10%**
% Impervious Surfaces	**19%**
Net change in impervious surface area, 2001-2021	**1%**

Developing natural areas can reduce resilience on the local and regional level. Development in forests and wetlands can limit carbon sequestration, increase energy demands, and exacerbate potential impacts of natural hazards, such as flooding and extreme heat.

DATA SOURCES AND NOTES

This GHG inventory focuses on emissions from activities and energy consumption within the Village of Wilson using the latest available data as of 2024. Emissions were estimated using the 2015 New York Community and Regional GHG Inventory Guidance (NYS DEC) which complies with Federal and International protocol for GHG inventories. For more details, see our full Methodology document available on our GHG Inventory Dashboard. GHGs are reported in Metric Tons of CO2 equivalent (MTCO2e). 1 MTCO2e can power the average US home for 1.5 months.

COMMUNITY CONTEXT: US Census Bureau, American Community Survey, 5-year estimates, 2022. Note: US Census job estimates do not match official US BLS data.

GHG EMISSIONS: UBRI analysis, various sources, 2024.

Transportation: On-road: NYS DOT, Vehicle Miles Traveled, 2022 and Annual Avg. Daily Traffic, 2019; NYS DMV, vehicle registrations by ZIP and vehicle class fuel mix, 2024; ReplicaHQ, Network VMT Calculator, Trip Origin-Destination, 2024; Aviation: US Bureau of Transportation Statistics (BTS) total flight miles per airport, 2022; US EPA, National Emissions Inventory, 2022; US BLS, 2022; US Census, ACS, 2022; Off-road and Marine: US EPA National Emissions Inventory; Rail: US EIA, 2022 and US BTS, 2023.

Residential, Commercial, and Industrial: Utility data on electric and natural gas consumption from NYS Utility Energy Registry (UER), 2024; US EIA, State Energy Data System and Residential Energy Consumption Survey, 2022; Erie and Niagara County, Tax Parcel Data, 2024; State data on the use of other fossil fuels is allocated to communities based on the number of occupied housing units or commercial/industrial square footage (using 2024 tax parcel data); Industrial includes Ozone Depleting Substance Substitutes (US EPA, National Emissions Inventory, 2022) and NYS DEC Title V Facilities (2024) on industrial pollution. NOTE: Monthly community-level energy consumption data is provided as-is by utility companies and may include inaccuracies.

Agriculture: USDA Agricultural Census, 2022; US EPA's State Inventory Tool, 2024. Emissions allocated to community based on parcel data.

Waste: NYS DEC Landfill and water treatment facility reports, 2023; NYS Solid Waste Management Plan, 2018; EPA Recycling Map, 2024; IPCC, 2019 IPCC Guidelines for GHG Inventories; US EPA, State Inventory Tool, 2024. Emissions allocated to municipalities using 2024 tax parcel data.

Energy Distribution: US Enery Information Administration. Statewide Capacity Factors, 2023; NYS UER, 2024.

PER CAPITA EMISSIONS: US EPA, 2024; NYS UER, 2024; US Census, ACS, 2022.

PER CAPITA ENERGY CONSUMPTION: NYS UER, 2024; US Census, ACS, 2022.

RENEWABLE ENERGY PRODUCTION:UBRI analysis of NYSERDA-Supported Solar Projects, 2024; US Geological Survey, US Wind Turbines, 2024; US EIA Form-923 Data, 2024.

TRANSPORTATION CONTEXT:
Vehicles and Electric Vehicles: NYS DMV registration by ZIP code, 2024. ZIP code data is allocated to municipalities based on the percentage of housing units in each ZIP code that fall within each intersecting municipality, found using block-level data on housing units from the 2020 US Census. **Walkability and Bike Score:** WalkScore.com, 2024. **Bike Lanes:** GBNRTC, 2024. **Travel Mode**: US ACS, 5-year estimates, 2023.

CONTEXT MAP:
Population in LIDACs: US Census, ACS, 5-year estimates, 2023; NYSERDA, LIDACs, 2023.**Solar energy sites:** Solar Electric Programs Reported by NYSERDA: Beginning 2000. Accessed June, 2024. **Remediated Brownfields:** NYS Department of Environmental Conservation (DEC), Remediated Sites Database, 2024. **EV Charging Stations:** NYSERDA, 2024. Wetlands: NYS DEC, Regulated Wetlands, 2024. Public Parks and Conserved Lands: NYS DEC Protected Lands; County Tax Parcel Data; National Conservation Easement Database, 2024. Forests: USGS, National Land Cover Data (NLCD), 2021.

CHANGE IN DEVELOPED LAND AND IMPERVIOUS SURFACES: UBRI analysis of USGS, NLCD, 2001 and 2021.

EXPLORE ONLINE

VISIT OUR WEBSITE TO SEE THE INTERACTIVE BUFFALO NIAGARA GHG INVENTORY DASHBOARD

Scan here to visit an interactive website with more details on the GHG emissions in your community.

This Greenhouse Gas Inventory is part of the **2025 Regional Greenhouse Gas Inventory** for the Buffalo Niagara Region (Erie & Niagara Counties) that was prepared as a part of the scope of the region's grant from the US Environmental Protection Agency (EPA) Climate Pollution Reduction Grant (CPRG) program. The inventory is part of **One Region Forward (1RF)**, a broad-based, regional planning initiative led by the Greater Buffalo Niagara Regional Transportation Council that seeks to promote sustainable forms of development in land use, transportation, housing, energy and climate, and food access. Analysis and production of the GHG Inventory was produced by the **University at Buffalo Regional Institute** through its role supporting One Region Forward with engagement, and technical analysis.

GBNRTC

University at Buffalo Regional Institute
School of Architecture and Planning

Visit our 1RF website for more information: www.oneregionforward.org

Recommended Citation: University at Buffalo Regional Institute, State University of New York at Buffalo, School of Architecture and Planning. 2025. "Buffalo Niagara 2025 Regional Greenhouse Gas Inventory: Village of Wilson Local Summary."